

TRIDENT T-82 DISK DRIVE

CalComp's Model T-82 member of the TRIDENT family is essentially a T-80 utilizing a differential type interface and address plug selection. The T-82 offers the OEM designer, who prefers a differential type interface over the standard TRIDENT DTL/TTL interface, all of TRIDENT's advanced and economical features. This includes track following servo, 3330

technology, internal VFO, enclosed air flow system, variable sector length and modular construction for ease of maintenance.

In addition to all of these significant design features, CalComp as the largest independent disk drive manufacturer provides a full range of support services.

T-82 FEATURES

SINGLE COMPACT SELF-CONTAINED UNIT allows flexibility for low-boy, table top or 19" RETMA-rack drawer mounting with front and rear access.

FIVE-HIGH STANDARD 3336-TYPE DISK AND A 3330-TYPE SPINDLE INTERFACE which are available from multiple sources.

VFO in the TRIDENT T-82 eliminates need for including complex analog circuitry in the controller.

HIGH VOLUME INTEGRAL AIR FLOW SYSTEM provides clean room quality and thermally stable air, giving added assurance of data reliability.

STATE-OF-THE-ART ACCESS TIME OF 6 msec. max. track-to-track and an average head positioning time of 30 msec provide optimum system throughput.

FAST START TIME AND DYNAMIC BRAKING permit rapid pack change.

PROGRAMMABLE HEAD OFFSET AND VARIABLE STROBE TIMING features maximize recovery of marginal data and ensure high data integrity.

ELECTROMAGNETIC ACTUATOR AND PRERECORDED SERVO SURFACE provide proven, superior head positioning accuracy, track densities and reliability. The TRIDENT family offers the OEM designer a new dimension in improved data integrity for his system.

SECTOR LENGTH SELECTION through jumpers on sector board.

FUNCTIONALLY ORGANIZED PRINTED CIRCUIT BOARDS facilitate maintenance and reduce MTTR.



LOW BOY



RACK MOUNT



TABLE TOP

T-82 SPECIFICATIONS AND CHARACTERISTICS

CAPACITY

82.1 million 8-bit bytes

TRANSFER RATE

1209 Kilobytes per second

ACCESS TIME

Track to Track: 6 msec. max.
Average Positioning: 30 msec.
Full Stroke: 55 msec. max.
Average Latency: 8.3 msec.

ROTATIONAL SPEED

3600 rpm

PACK START/STOP TIME

Start Time: 20 seconds (nominal)
Dynamic Braking: 20 seconds (nominal)

DENSITIES

Track Density: 370 tracks per inch
Recording Density: 6060 bits per inch
20,160 bytes per track
100,800 bytes per cylinder

DISK PACK CHARACTERISTICS

Disk Pack: IBM 3336-type components
Recording Surfaces: 5 plus 1 servo surface
Tracks per Surface: 815

OPERATING METHODS

Recording Method: Modified Frequency Modulation
Positioning Method: Linear Motor; Track-Following
Servo

ERROR RATE

Recoverable: 1 error in 10^{10} bits
Non-recoverable: 1 error in 10^{13} bits
Positioning: 1 error in 10^6 seeks

RELIABILITY

MTBF: Designed to exceed 4000 hours
MTTR: Designed to be less than 1 hour
Service Life: 5 years or 45,000 hours

CONTROLS & INDICATORS

Ready Indicator/Logical Address Plug
Fault Indicator
Start/Stop Switch
Degate Switch

EXTERNAL DIMENSIONS

17.8" wide x 10.5" high x 32" deep
(452 mm wide x 267 mm high x 813 mm deep)

POWER REQUIREMENTS

Input Voltage: 117, 190, 200, 208, 220, 230, 240 vac
(+ 10%, - 15%)
Line Frequency: 60 Hz $\pm 1\%$ (50 Hz $\pm 1\%$, optional)
Starting Current: 117 vac Models = 24 amperes.
Other Models = 13 amperes.
Operating Current: 117 vac Models = 7.5 amperes.
Other Models = 4.5 amperes.

OPERATING ENVIRONMENT

Temperature: 60°F (16°C) to 100°F (38°C)
Temperature Gradient: 20°F (11°C)
Humidity: 10% to 80% (no condensation)

HEAT DISSIPATION

2500 BTU/hour

AIR FLOW

100 CFM

OPTION

Off-line Exerciser



California Computer Products, Inc.
2411 W. La Palma, Anaheim, CA 92801
Tel (714) 821-2011 Twx 910-591-1154